PATENT ABSTRACTS OF JAPAN

(11)Publication number:

01-162165

(43)Date of publication of application: 26.06.1989

(51)Int.Cl.

G01R 21/06

(21)Application number: 62-321998

(71)Applicant: SUMITOMO ELECTRIC IND LTD

(22)Date of filing:

18.12.1987

(72)Inventor: HIROTSU KENICHI

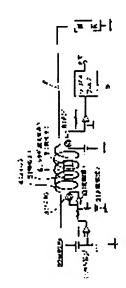
(54) POWER SENSOR

(57)Abstract:

PURPOSE: To achieve a smaller size and a lighter weight of the apparatus, by a method wherein a modulation is applied to a light emitting element by a voltage at a measuring point and light thus obtained is passed through a Faraday effect element subjected to a modulation by a current at the measuring point to form a power sensor requiring no current transformer.

CONSTITUTION: A light emitting element LED 3 is driven with a DC power source 2. As the element is controlled with a modulator 10 with the application of a voltage of a capacitor voltage divider 1 thereto, emission of the LED 3 is turned to a light modulated by a voltage signal. The light modulated generates a Faraday effect in a coil 4 by a magnetic field with a current flowing to the coil 4 through a Faraday effect element 6

placed between a polarizer 5 and an analyzer 7 to cause a



modulation of light. Light emitted from the analyzer 7 is received with a photo diode PD8 to be converted into electricity which is passed through a low pass filter 9. Thus, with the removal of an AC component, a DC component is determined to be measured with a voltmeter.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application

- converted registration]
- [Date of final disposal for application]
- [Patent number]
- [Date of registration]
- [Number of appeal against examiner's decision of rejection]
- [Date of requesting appeal against examiner's decision of rejection]
- [Date of extinction of right]